RUH-284

MARKED-UP VERSION OF CLAIMS

Claim 1 (amended) A catalyst comprising palladium, at least one alkali metal compound and, [if desired] optionally, at least one [or more promoters] promoter on a porous support, [obtainable] obtained by loading the porous support, which comprises a reducible metal oxide of elements of groups IIIb, IVb, Vb, VIb of the Periodic Table of the Elements or ZnO or comprises a mixture of these oxides or a mixed oxide of these elements in which zinc may also be present, with at least one palladium compound, subsequently carrying out [a] reduction at a temperature of 300-600°C and additionally applying at least one alkali metal compound and, [if desired] optionally, at least one [or more promoters] promoter before or after the reduction.

Claim 2 (amended) A catalyst [as claimed in] of claim 1 which comprises at least one potassium compound.

claim 3 (amended) A catalyst [as claimed in] of claim 1 [or 2] which additionally comprises at least one member of the group consisting of Au, Ba, [and/or] Cd and[/or] their compounds as [promoters] promoter.

Claim 4 (amended) A catalyst [as claimed in one or more] of [claims 1 to 3] $\frac{\text{claim 1}}{\text{claim 1}}$, wherein the reducible support is TiO_2 .

Claim 5 (amended) A catalyst [as claimed in one or more] of [claims 1 to 4] $\frac{1}{2}$ claim 1, wherein the reduction is carried out for [a time in the range from] 1 minute to 24 hours.

Claim 6 (amended) A catalyst [as claimed in one or more] of [claims 1 to 5] $\frac{1}{2}$ claim 1, wherein the reduction is carried out using gaseous or vaporizable reducing agents.

Claim 7 (amended) A catalyst [as claimed in one or more] of [claims 1 to 6] $\underline{\text{claim 1}}$, wherein the reducing agent for the reduction is $\underline{\text{at least one member}}$ selected from the group consisting of H_2 , CO, ethylene, NH_3 , formaldehyde, methanol, hydrocarbons [and their mixtures] and mixtures of these reducing agents with inert gases. U

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Claim 8 (amended) A process for producing [catalysts, which comprises] a catalyst of claim 1, comprising loading the porous support, which comprises a reducible metal oxide of elements of groups IIIb, IVb, V, VIb of the Periodic Table of the Elements or ZnO or comprises a mixture of these oxides or a mixed oxide of these elements in which zinc may also be present, with at least one palladium compound, subsequently carrying out [a] reduction at a temperature of 300-600°C and additionally applying at least one alkali metal compound and, [if desired] optionally, at least one [or more promoters] promoter before or after the reduction.

Claim 9 (amended) The process [as claimed in] \underline{of} claim 8, wherein the catalyst comprises at least one potassium compound.

Claim 10 (amended) The process [as claimed in] of claim 8 [or 9] wherein the catalyst additionally comprises at least one member of the group consisting of Au, Ba, [and/or] Cd and[/or] their compounds as promoters.

Claim 11 (amended) The process [as claimed in one or more] of [claims 8 to 10] claim 8, wherein the reducible support is ${\rm TiO_2}$.

Claim 12 (amended) The process [as claimed in one or more] of [claims 8 to 11] <u>claim 8</u>, wherein the reduction is carried out [for a time in the range] from 1 minute to 24 hours.

Claim 13 (amended) The process [as claimed in one or more] of [claims 8 to 12] claim 8, wherein the reduction is carried out using gaseous or vaporizable reducing agents.

Claim 14 (amended) The process [as claimed in one or more] of [claims 8 to 13] <u>claim 8</u>, wherein the reducing agent for the reduction is <u>at least one member</u> selected from the group consisting of $\rm H_2$, CO, ethylene, NH₃, formaldehyde, methanol, hydrocarbons [and their mixtures] and mixtures of these reducing agents with inert gases.